

464.1006 CON4

B2
25. (Amended) The array of claim 20, wherein the beads of each type are further distinguishable by a unique chemical or physical characteristic that identifies said bead type.

B3
27. (Amended) The array of claim 20, wherein the array comprises subarrays that are spatially separated from each other, the location of the subarrays uniquely identifying the types of beads located therein.

B4
28. (Amended) The array of claim 20, wherein the bead array is on a silicon electrode.

B5
30. (Amended) A method of detecting the formation of a target-biomolecule complex comprising the following steps:
providing an array of beads according to claim 20;
contacting said beads with a sample that may contain a target compound such that, if the target is present in the sample, said target binds to said biomolecule to form a target-biomolecule complex; and
detecting the formation of the target-biomolecule complex.

B6
32. (Amended) A method of detecting the formation of a target-biomolecule complex comprising the following steps:
providing an array of beads according to claim 20, wherein said bead types are further distinguishable by a unique chemical or physical characteristic that identifies said bead type;
contacting said beads with a sample that may contain a target compound such that, if the target is present in said sample, said target binds with said biomolecules to form target-biomolecule complexes;

464.1006 CON4

detecting the formation of the target-biomolecule complexes; and
identifying the biomolecules of the target-biomolecule complexes by means
of the unique chemical or physical characteristics of the beads associated with said complexes.

B7 40. (Amended) The method of claim 32, wherein the bead array is on a silicon electrode.

Please add new claims 41 and 42 as follows:

B8 41. (Amended) The method of claim 20, wherein the bead array is on a chip.

42. (Amended) The method of claim 30, wherein the bead array is on a chip.

REMARKS

This Preliminary Amendment is being submitted in order to more clearly define the invention. By this amendment, claims 20, 25, 27, 28, 30, 32 and 40 have been amended; claims 24 and 31 have been canceled; and new claims 41 and 42 have been added. A marked-up version of the claims showing the changes made to the claims is enclosed hereto as Exhibit A. Support for the claims may be found, for example, on page 26, line 14 to page 34, line 7, and page 38, line 31 to page 44, line 31. Accordingly, claims 20 to 23, 25 to 30, and 32 to 42 are now pending in the application.

It is believed that no fee is required in connection with the filing of this Amendment. The